Mixed Hardwood Forests

About half the 52,000 acres in the Blackbird-Millington Corridor Study Area is forested, with the largest tracts protected and managed as the Blackbird State Forest and Millington Wildlife Management Area. Forests are at the heart of what makes the Blackbird-Millington Corridor so special. They provide habitat for many species, offer shady trails for hunting and recreation, improve local climate and air and water quality, contribute to the local economy through timbering and ecotourism, and maintain the scenic and private qualities of the area. With less than 20% of the original forest remaining in Delaware, the Corridor's forests are significant statewide. The community has identified protection of forests in the Corridor as the top priority

Majestic oak, beech, and hickory trees dominate the canopy and offer nuts for deer, turkey and other animals. Songbirds and raptors use this large forest to find food, shelter, rest, and protection while migrating or nesting. Nourishing insects and berries are provided by understory plants such as blueberry, holly, shadbush, sassafras, and viburnum. Large blocks sizeable interior forest (the area at least 300' inside the outer edge) are needed to support many animals, protecting them from predators and other disturbances found at forest edges. At intact 1,000-acre forest provides habitat for more species than a hundred smaller 10-acre forests. Forest fragmentation -- clearing for development, agriculture and/or timbering that leaves forests in smaller, isolated, and often less-diverse patches -- is the largest threat to healthy forest communities in the Corridor.

"Many birds and other wildlife species need large unbroken areas of forest to survive."

\- Maria Trabka, Delaware Bayshores Project Director, TNC Delaware

What do we need to do to preserve mixed hardwood forest habitats and inhabitants?

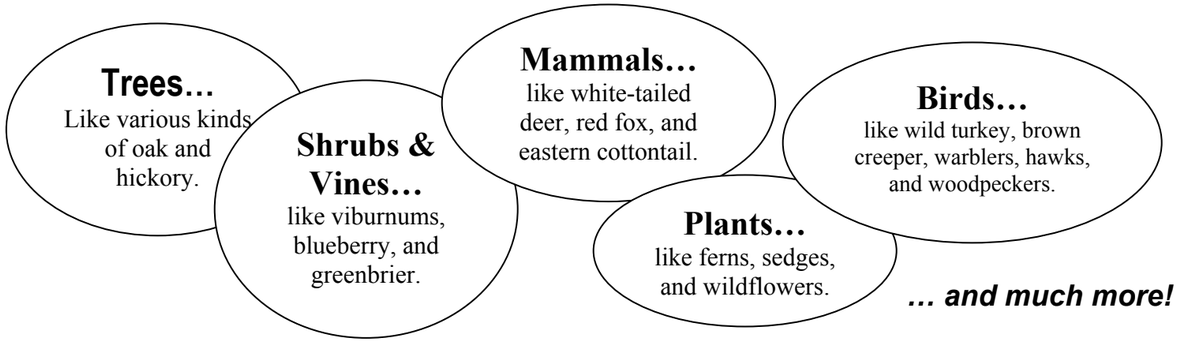
1. Protect, restore, and/or maintain large contiguous areas of interior forest and forested connections (corridors) between patches of forest.

2. Manage forests for multiple ages and species of trees including seedlings and saplings, dead wood, "old growth," and oak-dominated canopy.

5. Minimize additional fragmentation of forest patches by residential and road development.

6. Control the expansion of invasive plants (like Japanese honeysuckle, multiflora rose, and Russian olive) that threaten our native plants. Prevent introductions of additional invaders.

Who needs mixed hardwood forests?



Ideas for Preserving Forests and Coastal Plain Ponds:

What do **you** think will work?

Please call or mail your response by August 21st to:
Judy Hopkins, BMC Outreach Coordinator
502 Blackbird Forest Road
Smyrna, DE 19977
302-653-9078 ♦ jhopkins@tnc.org

Teams of local residents, scientists, conservationists, and planners have come up with some ideas for preserving the forests and coastal plain ponds of the Blackbird-Millington Corridor. Please take a moment to consider these ideas and rate whether you think they'll work or not. If you have other ideas, please note them as well. Thanks!

Ratings: 3= Good Idea, will work 2=Maybe, has potential 1=Poor Idea, won't work 0= Unsure

Ideas:	**Rate 0-3**
Idea #1 – Create a pool of public or private funds to make the restoration of drainage ditches and/or reforestation free to landowners.	
Idea #2 – Create programs in MD and DE to purchase development rights from private landowners on forested lands (similar to state farmland preservation programs).	
Idea #3 – Designate units of Blackbird State Forest and Millington Wildlife Management Area for management as multi-aged, oak-dominated old growth forest "preserves."	
Idea #4 – Designate Corridor as a sending zone for transfer-of-development-rights (TDR) programs in the three counties, so that development is "sent" from the Corridor to designated receiving zones elsewhere.	
Idea #5 – Increase federal, state, and county spending for open space protection and make the Corridor a priority for land protection programs that utilize these funds.	
Idea #6 – Offer workshop for landowners on the opportunities available for getting technical and financial assistance for land protection and/or habitat restoration on private lands. Offer tours of actual restoration sites to demonstrate reforestation techniques and results.	
Idea #7 – Provide technical assistance for landowners on the financial aspects and benefits of land protection as they relate to retirement and estate planning.	
Idea #8 – Provide additional incentives for conservation easements to protect and restore forest and coastal plain ponds on properties in the farmland preservation program.	
Idea #9 – Provide a tax credit for reforestation.	
Idea #10 – Integrate conservation of priority forests and coastal plain ponds into transportation planning for new and upgraded roads to minimize impacts.	
Idea #11 – Create a forest "bank" that developers must contribute to if they remove forest cover. Use forest bank funds to protect and/or restore other forestlands.	
Idea #12 – Train landowners to identify and control invasive species.	
Idea #13 – Use conservation easements to protect coastal plain ponds and forests on private lands. Encourage landowner donations and identify sources of private funds for compensation.	
Idea #14 – Establish a bond referendum in all three counties to raise public dollars for conservation incentives.	
Idea #15 – Create a "backyard habitat" program for coastal plain ponds in residential areas.	
Your ideas or additional comments about the Blackbird-Millington Corridor Study Area:	

The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

502 Blackbird Forest Road
Smyrna, DE 19977

The Blackbird-Millington Corridor is a landscape of forests, farm fields, streams and tidal marshes that spans the Delmarva Peninsula. The Corridor is home to a wonderful diversity of plants, animals, and rare ecological systems – and is a priority area for conservation for many residents and organizations.

FIELD TRIPS: YOU'RE INVITED!

Hardwood Forest Management
August 10, 2004, 8:30am.
Tour the new education center and trails at Blackbird State Forest with Jim Dobson, Blackbird State Forester, The Meadow Tract, Blackbird Station Road.

Ecology of Riparian Corridors
Morning of September 18, 2004
Explore the banks of Blackbird Creek by canoe with Dave Carter, Delaware Coastal Management Program. Canoes will be provided or bring your own.

Please RSVP by calling 302-653-9078.

The Nature Conservancy (TNC) is facilitating a community conservation plan. Local residents and others who care about the area – farmers, families, hunters, loggers, hikers and scientists – have been bringing their knowledge and perspective to the table. Together we are: 1. Finding out what the community values and wants to preserve; 2. Sharing information on why scientists value this place and what is required to maintain it; 3. Identifying the overlap between community values and scientific values and what can be done; 4. Identifying resources, tools, and programs that can help with preservation.

Look inside to tell us what you think!

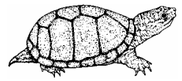
Blackbird-Millington Corridor News

July 2004 - Forests & Coastal Plain Ponds

Community Identifies Conservation Priorities

Working in teams and through public workshops since this past spring, the local community in the Blackbird-Millington Corridor Study Area identified five priorities for preservation in the Corridor**: forests, coastal plain ponds, stream corridors, tidal wetlands, and their rural way of life.** We are featuring forests and coastal plain ponds in these pages.

The Delaware Chapter of The Nature Conservancy (TNC) is facilitating the Blackbird-Millington Corridor project by coordinating the efforts of dozens of scientists, community members, and planning experts interested in preserving the rural and natural heritage of the Corridor. TNC has protected more than 98,600 acres on Delmarva. We work with local communities, government agencies, and other organizations to find solutions for protecting land, water, and natural resources with willing landowners. A private, non-governmental, non-profit organization, The Nature Conservancy is supported by members who care deeply about preserving plants and animals.



Coastal Plain Ponds

a.k.a. Delmarva Bays, Whale Wallows, Carolina Bays

Coastal plain ponds are shallow, often oval-shaped wetlands. They have water levels that rise and fall over course of the year in connection with the water table. Because they are sometimes flooded and sometimes dry, they support a unique combination of plants that are adapted to cope with the change in water levels. Fish cannot survive the dry spells, making coastal plain ponds a safer habitat for frog and salamander eggs and young. These unique wetlands occur up and down the North Atlantic Coast. The Blackbird-Millington Corridor Study Area has one of the highest densities of them on Delmarva.

Coastal plain ponds need forested areas surrounding and connecting them in order to have healthy and diverse populations of adult salamanders. Clearing of forest between and around ponds for residential development, agriculture, or timbering is the top threat to their continued existence. They also need naturally fluctuating groundwater levels, which are disrupted when ponds are drained with ditches. Water quality is also important because of the sensitivity of amphibians and plants to water and soil chemistry.

Who Needs Coastal Plain Ponds?

- **Waterfowl**, like wood ducks.
- **Amphibians**, like the barking tree frog and the tiger salamander.
- **Snakes**, like the bronze copper snake.
- **Turtles**, like the eastern mud turtle.
- **Dragonflies**, like the harlequin darter.
- **Trees and shrubs**, like red maple and buttonbush.
- **Plants,** like sedges, Harper's dwarf fimbry, and mosses.
- **...and many, many others!**

What do we need to do in order to preserve coastal plain pond habitats and their inhabitants?

1. Permanently **protect high quality clusters** of coastal plain ponds and their buffers.

2. Increase forest cover for clusters of ponds by restoring forest around and between them.

3. Conduct research to determine the water level fluctuations and pH needed to sustain plants and amphibians.